LITTLE BLUE BOOK NO. 127
Edited by E. Haldeman-Julius

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INTRODUCTION

This little book is designed for active and prospective mothers. It is not intended to supplant more ambitious works where such are appropriate, nor to interfere with the nurse or physician, but rather to supplement and aid them by enlisting the intelligent co-operation of their patients. It is an effort to furnish every inquiring mother with reliable information in regard to that personal hygiene and protection during her functional activity which is essential to the safety of herself and child. It is a knowledge which will enable her to conserve her strength intelligently and to recognize any variation from the normal in time to secure relief. Most of the material has been adapted from the writer's more elaborate manual, "Obstetrics for Nurses."

C. B. R.

WHAT EVERY EXPECTANT MOTHER SHOULD KNOW

THE SIGNS

How shall I know that I am pregnant, is the first question to which a prospective mother seeks an answer. There are many signs of this condition, but several in particular which she may herself observe. These are:

1. The menses fail to appear (amenorrhoea).
2. Nausea and vomiting in the morning.
3. Frequent urination.
4. Changes in the breasts.
5. Quickening.

CESSATION OF THE MENSTRUAL FLOW is practically invariable in pregnancy. One and sometimes two periods may appear after conception, but other causes of bleeding must be excluded. Sudden stoppage of the periods in a healthy woman of child-bearing age is strongly suggestive of pregnancy. To be sure, the periods may sometimes be absent on account of fright, grief or disease, a change from a low to a high altitude, or to an ocean voyage; but they rarely remain away, in such cases, for more than two or three months. The fear of becoming pregnant as well as excessive indulgence in intercourse will occasionally have the same effect. Stopping of menstruation is also common when a woman has a systemic

disease like tuberculosis or some deficiency in the quality or the quantity of the blood.

MORNING SICKNESS occurs in about one-half of all pregnancies, but more often with the first than subsequent pregnancies. This symptom usually appears soon after the first period is missed, and it varies greatly in severity at different times and in different people. Some women have a little nausea on arising in the morning and no more that day, while others may be sick in the morning and after each meal, or, indeed, all day and all night. Still, the tongue generally remains clean in these cases, and the health of the body is not otherwise affected. Most physicians believe this symptom is produced by an irritation of the nerves through some of the by-products of pregnancy.

FREQUENCY OF URINATION is not uncommon during the first three months, but it occurs often also in other conditions, so that it is not particularly significant except as a sign of pelvic congestion due to the growth of the egg.

QUICKENING occurs about the seventeenth week of pregnancy. By this is meant the recognition by the mother of the movements of the arms and feet and trunk of the child in the uterus. The sensation is conveyed directly to the tissues of the mother by contact. It has been likened to the flutter of a bird held in the closed hand, or to the twitching of a muscle.

Either from ignorance, from disease, or in

tent to deceive, any or all of these symptoms may be present in a non-pregnant woman, but at the tenth week the changes in the womb will be so marked that an internal examination will settle all doubts. The X-ray also will give a definite picture as early as the bones will throw a shadow. The doctor's opinion may be formed much sooner, but he usually holds his decision in abeyance until the proof is beyond dispute.

The REGULARITY OF UTERINE GROWTH, especially if measured at definite intervals with the tape line, is one of the more reliable signs. At the fourth month the uterus can be felt as a perfectly round ball just above the pelvic bone in front. At the sixth month it reaches to the navel and at the eighth month it is midway between the navel and the breastbone.

Being satisfied that pregnancy exists, our curiosity is aroused to know when the labor will occur. Unhappily a decision on this point cannot be very accurate, since the onset of the pains is entirely accidental. The inauguration of the pains seems to depend on many factors, and none of them is certain. Furthermore, conception does not take place necessarily at the time of intercourse, and we have no means of knowing whether the fertilization of the egg occurred just after the last period present or just before the first period missed. Thus there is always a possible error of three weeks.

The DATE OF CONFINEMENT is calculated approximately in several ways. We as-

sume with a justice founded on many years of intelligent observation that the duration of human pregnancy is about two hundred and seventy-five days and so we count back three months from the day on which the last menstrual period began and add seven days. The result is the date on which the pregnancy should end. Or, one may count twenty-two weeks from the day of quickening or, two weeks from the day on which lightening was noticed or, two hundred and seventy-five days from the day on which conception was supposed to occur.

LIGHTENING is due to the descent of the head into the pelvis. It is more common among women who are carrying their first baby. In all cases, with or without lightening, the maturity of the babe can be safely established by measurements which the physician may make through the abdominal walls.

The HYGIENE OF PREGNANCY is made up of those measures which are used in the belief that they contribute to the health of the mother and child. It is really a physical and mental preparation for the birth and nourishment of the babe. The mother must learn that breast fed infants thrive better and have fewer diseases than those reared on the bottle and that her own habits and manner of life during pregnancy have an important influence upon the developing child.

In the matter of DIET the mother must remember that the child is entirely dependent on her blood for its nourishment. If therefore she lives in such a way as to promote her own

health; if she gets enough sleep and exercise; eats sensibly of simple foods and sees to it that her digestive organs are in good condition, she can be reasonably sure that her child will build up a normal brain in a healthy body.

The mother need not alter her ordinary diet materially if it has been properly and thoughtfully chosen. Any food or drink which causes discomfort or indigestion should be avoided now just the same as if no pregnancy existed.

In general the mother must consider the prime importance of elimination. The bowels, the skin and kidneys must be kept actively at work excreting the waste products of the mother and of the child she carries. These waste products sometimes accumulate and cause dangerous complications. Liquids, and especially fresh fruits and vegetables must therefore form a large part of her daily diet. Water, cocoa, chocolate, soups, broths, milk and buttermilk should be taken freely. Eight glasses of fluid a day is none too much. If the milk constipates, it may be replaced by something else--possibly a weak tea. Strong tea and coffee must be avoided at all times.

All of the cereals and especially oatmeal and bran are desirable and only those foods, cereal or vegetable, which produce indigestion are omitted. Meat is permissible once a day unless there is trouble with the kidneys or some other disorder which makes it unwise to eat meat at all. The dried fruits like figs, dates, apricots, prunes, apples and peaches may be eaten generously either cooked or as they

come. It is not necessary to "eat for two." The stomach must not be overloaded and it is far better to eat lightly several times a day than to disturb the digestion even transiently.

LONGINGS are really an eccentricity of appetite and a perversion of taste. The woman craves peculiar and sometimes unnatural or even revolting articles of food. It was thought at one time that this was a sign of something detrimental to the child and a multitude of devices were invented to bring it into control. We now know the condition is harmless and the appetite may be indulged freely in all reasonable foods.

CONSTIPATION is almost the rule in pregnancy. It is due partly to lack of fluids, partly to changes in the bowel secretions and partly to pressure and mechanical crowding. Fresh fruits, and berries will help, (apples, peaches, apricots, oranges, pears, cherries, pineapples, grapes, grapefruit, plums and all berries except blackberries). The dried fruits are also valuable. Prunes, figs, dates, apples, peaches, apricots and pears may be eaten freely, cooked or uncooked.

Whole wheat bread, graham bread, bran in all forms, cornmeal, oatmeal, hominy and grits, all stimulate intestinal activity. Fresh vegetables again are desirable such as asparagus, tomatoes, peas, beans, carrots, spinach, celery, cress, lettuce and turnips. Onions are especially good and potatoes eaten with the skins, cabbage, cauliflower, brussels sprouts and radishes are all right if they do not disagree.

ENEMAS are not suitable for everyone and if frequently used they tend to weaken the muscular activity of the lower bowel Besides it is only the lower end of the intestine that they empty; the upper part is unaffected. Russian oil (Liq. Petrolatum) often acts happily but if the constipation persists the doctor should be notified.

EXERCISE. A pregnant woman should spend at least two hours daily in the open air. The exercise should not be violent nor attended by risk or great excitement. Golf, swimming, tennis, dancing, horseback riding, the bicycle and fast driving in the automobile should be avoided. Agreeable open air occupations strengthen the muscles, stimulate excretion and refresh the nervous system but the point of moderate fatigue must not be overstepped. The bracing outside air purifies the blood, clears the brain and promotes digestion and assimilation of food. Walking in moderation is best. It develops the abdominal muscles, causes deep breathing and assists elimination. To try to develop, during pregnancy however, a set of muscles long quiescent in the hope of aiding the approaching delivery is fruitless. Travel must be restricted but mental diversion is essential if courage and cheerfulness is to be maintained.

PLENTY OF FRESH AIR must be available night and day. If the woman cannot sleep out of doors, the windows should be flung wide open at night. The living rooms too must be well ventilated always.

SLEEP. The expectant mother requires

more than the usual hours of rest She should take as much sleep as possible at night, at least six hours, and not allow her pride to stand in the way of an additional nap in the daytime.

CLOTHING must be warm, loose, simple and suspended from the shoulders. To prevent chilling, wool or silk should be worn next to the skin—light weight in summer and heavy in winter. It is now possible to have a maternity gown that is wholly suitable to the condition and agreeable to look at without emphasizing the pregnancy. Any pattern book will supply numerous models if sufficient variation is not to be found in the shops.

Union suits, either with or without neck and sleeves as the season demands, a maternity corset or waist without bones and with side elastics for the stockings furnish the fundamentals. Over this may be thrown a light weight petticoat and then the maternity dress.

The "straight front" corset may be worn up to four or five months but at that time it should be replaced by the maternity type—a type which does not constrict but lifts up. During the last eight weeks some form of abdominal support is often required.

Circular garters must not be worn at any time because they favor the formation of enlarged veins in the legs, (varicose veins). The breasts may become heavy and painful and require the application of a well fitting bust supporter.

Comfortable, sensible shoes are necessary and broad low heels are quite important to

help the woman keep her balance. Toward the end of the pregnancy the feet may swell and require shoes much larger than usual.

The SKIN demands much attention for a large part of the waste of the body, probably a pint a day, is thrown off through the pores and sweat glands. These little openings must not be allowed to get clogged and the entire body should be washed at least once a day. This bath may be shower, tub or sponge up to the eighth month then the tub should be given up. The water must not be too hot or too cold but just a little above the temperature of the body. It should feel gratefully warm to the surface of the body. Besides cleaning the skin the bath stimulates the circulation and this effect is increased by brisk friction with a warm towel of coarse fibre—the Turkish type. A mild unirritating soap may be used two or three times a week unless the skin is overly sensitive. In such cases cocoanut oil may be used for whole bath.

VAGINAL DOUCHES should be used sparingly, if at all, during pregnancy. The water should be of tepid temperature only and the reservoir just a few inches above the level of the hips. Sometimes it happens that the secretions are unusually abundant and a daily washing of the external parts will be desirable not only for cleanliness but to prevent odors and skin diseases. The internal douche is employed only for cleanliness so that no antiseptic is put in the water. If one is desired Boric acid may be used, as much as will dissolve in warm water.

The ODOR OF THE BODY during pregnancy sometimes becomes offensive and gives a great deal of annoyance to the patient. The daily bath will be of value in these cases but since most of the odor comes from the decomposed secretions of the hair follicles it is often necessary to shave off the body hair. After washing the part (armpit) with soap and water it should be heavily dredged with a deodorant toilette powder.

The BREASTS will attract attention early. It is a great misfortune if a woman cannot nurse her child, and the breasts must be ready to play their important part after baby comes. The preparation of the organs should begin in early girlhood. Injury of the growing glands during exercise must be guarded against, as well as pressure from the clothing. When pregnancy supervenes the glands take on a new activity, and ample room for this development must be provided for in the looseness of the dress. About six weeks before delivery the doctor should examine the nipples and determine upon their suitability to functionate. They should not, as a rule, be toughened by the use of astringents, lest they become brittle and crack, but the crusts that form around the nipple and the dried scales can be removed by a daily wash with soap and warm water, while the nipple itself can be kept soft by the use of cocoanut oil or cocoa butter. Olive oil will do. The application should be made for two to six minutes every day and the nipple should be gently rolled and twisted and pulled

out by the thumb and finger to accustom it to use.

The TEETH frequently decay at this time. The old saying is, "with every child a tooth." The crumbling of tooth structure is probably not due to the demand of the growing babe for lime salts, as commonly supposed. All the teeth in the head would not be sufficient to supply this demand even partially. It is rather an expression of the general acidity of the body and especially of the digestive tract. In these cases of acid stomach (heartburn) large quantities of acid come back into the mouth at frequent intervals, and the teeth which are already imperfect suffer most. All cavities should be closed with temporary fillings of cement or gutta percha. There should be no pounding and the gold filling should be postponed until after labor, lest the decayed area enlarge still farther and require a later replacement. The tooth brush and mouth wash should be used zealously. An alkaline wash is best. Milk of magnesia is good.

HEARTBURN is a common complaint. It is really due to an over acidity of the stomach. Soda mint tablets, bicarbonate of soda or common baking soda dissolved in water and sipped, or magnesia in the cake or as milk of magnesia will all help at times.

FAINTING is not infrequent, but generally it is not serious. It is most likely to appear first about the time of quickening. The attack comes on as kind of hysteria when the patient is mixed in a crowd. The pallor is not deep,

the pulse is not affected, and consciousness is not lost. These attacks do not affect the egg, and smelling salts usually suffice to relieve, but the incident should always be reported to the doctor and the heart examined.

The MENTAL CONDITION should be placid without either excitement or depression. Cheerful company, judicious amusements and congenial occupation are desirable. Thoughtless neighbors, who tell frightful tales of disaster and death in labor, as well as nurses who relate the details of their critical cases are both to be avoided. Optimism and a good book are the best companions. Many women dread labor desperately. They are sure that death impends and they pick out and dwell upon the stories of the unfortunate. Such women can be reassured with the greatest sincerity. They have only to look around and see how many of their friends and relatives have passed the ordeal in safety. In all these cases of depression and anxiety much allowance must be made for the irritability of the nerves which comes from the poisons of pregnancy. The woman's outlook on life may be wholly reversed by this intoxication.

DETERMINATION OF SEX before delivery is impossible. The guess may be shrewd and frequently true, but it is always a guess. It is equally impossible to control or even influence the sex of the growing fetus. Much time, energy and talent have been expended on this problem in vain. At present scientists believe that the sex of the child is unalterably fixed

at the moment when the egg is fertilized. All we really know is that the ratio of boys to girls remains quite constantly at 106 to 100.

MATERNAL IMPRESSIONS is a subject of much discussion and anxiety among all classes of people. By this term the idea is conveyed that the growing child may be marked, injured or deformed in some way by the anger, fright, horror, depression or other emotional disturbance of the mother.

The scientific fact is that it is impossible for the mother to mark her offspring, either intentionally or by accident. Physiologists who have worked industriously on the problem declare unanimously that there is no nervous connection between the mother and the babe. There is no means by which a nervous or emotional impulse can be communicated to the child from the mother. Nutrition and excretion are the only functions of the umbilical cord which joins the child to the mother, and even through this the blood from the mother does not pass back and forth directly. The nutritive particles and the waste are selected and separated out by the action of certain specialized cells in the placenta. It really seems as if Nature had purposely erected a barrier to protect the child in the womb from injury. After conception occurs the mother does not influence the babe. She merely acts as a highly specialized incubator.

Some babies undoubtedly are born with "marks," but it is only a coincidence if the mark remotely resembles anything which can

be explained by an emotion. The fright or gruesome accident witnessed often happens several weeks before the mother really suspects her pregnancy, and she does not recall the event until the child is born.

The causes of the prenatal markings and the deformities of the embryo—the scientific name for unborn child—are well understood and it is not necessary to refer them to maternal impressions. Furthermore, all the marks and deformities that are found in the human family appear also among the lower animals which we are reluctant to credit with the qualifications or the susceptibility necessary to mark their progeny.

COMPLICATIONS OF PREGNANCY

NAUSEA AND VOMITING is uncomfortable and distressing, but happily it is not often dangerous. A cracker, a piece of dry toast or rusk taken without water or other liquid before rising in the morning is sufficient to relieve many cases. Occasionally six small meals can be retained where three or four larger ones would be rejected. The diversion of the mind from unpleasant symptoms and the maintenance of a Mark Tapley optimism are valuable aids to treatment. If the condition persists or gets worse instead of better, the doctor should be called, for it may develop into a serious disorder.

VARICOSE VEINS appear upon the legs and extend sometimes as high as the thighs or the genitalia. The vessels are enlarged, engorged and very crooked. The trouble is due to the changes in pressure produced by the growing egg. Constrictions of the legs by tight garments, bands or garters favor the occurrence. Much relief can be secured by elevating the legs when lying or sitting, but often this is not enough or it cannot be indulged in. A thin flannel bandage 3 inches by 5 yards wound snugly around the leg from the instep to the knee or even above the knee, if necessary, often gives relief. A rubber bandage of same size or an elastic stocking may be employed if the doctor so advises.

PILES, or hemorrhoids, are another instance of swollen veins. The trouble is frequently

present and much aggravated by the constipation of pregnancy and straining at stool. If loose bowel movements do not relieve, the doctor should be consulted. Compound licorice powder, aromatic cascara and paraffin oil are excellent laxatives. Cramps in the leg muscles may appear late in the pregnancy as a result of pressure on certain nerves or from waste accumulated in the muscles themselves. The attack may occur at any time whether the woman is asleep or awake. Rubbing will usually relieve the cramps, but if they occur frequently or last long the doctor should be notified.

LEUCORRHOEA is a milk-like discharge from the genitals which is due to the vast quantities of blood poured out into the pelvis, as well as to the congestion and pressure of the growing uterus. It is not dangerous. For cleanliness a douche may be used every other day if necessary. The reservoir should not be much higher than the hips and the water should be tepid, not hot. A teaspoonful of boric acid to the quart of water makes the solution mildly antiseptic.

PRURITUS, itching of the genitals or other parts of the body, is often distressing. It may be due to the irritation of local discharges, to altered conditions of the nervous system or to the toxemia of pregnancy. The urine should be examined for sugar. Bran baths, or alkaline baths, like bicarbonate of soda or weak solutions of "washing soda" will relieve many

cases for a time, but the doctor should be consulted in all cases.

TWINS occur about once in ninety pregnancies—triplets once in six thousand. Heredity and numerous pregnancies seem to be the only predisposing factors. The more pregnancies a woman has the more likely is she to have twins. They are sometimes due to the fertilization of a double-yolked egg, in which case they are always of the same sex. Twin pregnancies often go into labor earlier than the estimated date for the confinement. Twins should be suspected, or too much water, if the external measurements of the uterus greatly exceed the average for the epoch of the pregnancy. Systematic search will usually reveal two sets of heart tones of differing rapidity.

The TOXEMIAS. In health the body contains a variety of poisonous substances which are taken in by the food or produced by chemical changes in the system. These waste products are usually excreted through the intestines, kidneys or skin or rendered harmless in the liver. During pregnancy there is an enormous increase of these waste products, for the woman must eliminate the poisons of the fetus and of the growing uterus as well as her own normal output. In consequence, the maternal organs must exceed their regular functional activity or become clogged and overwhelmed.

The KIDNEYS play an important part in this process and even good organs can be disordered or broken down by the extraordinary demand. The usual output of urine is about

three pints daily. The elimination must be watched carefully and if the amount passed is less than three pints it means that the woman is below the average. She is probably not taking enough fluids. The urine when so condensed is also darker in color and contains considerable sediment. Furthermore, other abnormal elements like sugar may be found, so that it is wise to have a specimen examined every two weeks in the first half and every week in the last half of the pregnancy. These examinations are not troublesome and often a serious danger is averted.

In speaking of the poisons of pregnancy, we are brought face to face with our ignorance. We do not know exactly what these poisons are. But while we have not identified the poisons, we are acquainted with their effects and have learned to avert their evil activities. In most cases the presence of the poison is marked by certain definite and easily observed signs, such as:

1. Severe and repeated headaches.
2. Serious and persistent vomiting.
3. Pain in the pit of the stomach.
4. Dizziness.
5. Puffiness or swelling of feet, hands or eyelids.
6. Blurring of sight or spots before the eyes.
7. Neuralgic pains.
8. Muscular twitching.

Now it is true that one or more of these symptoms may come on and disappear without evil results but we must be sure that they are

not significant of serious disease. We must learn by examination of the urine and by taking the blood pressure that they are not due to an accumulation of waste products in the blood of the mother. We must know also whether she is manufacturing too much poison or excreting too little. Thus when she is aware of any of these symptoms she should take a specimen of urine and hurry to the doctor. It is a matter of vital importance to learn if these irregularities are innocent or a sign of danger.

Every child has an inalienable right to be well born and to start life with a competent mental and physical equipment. The mother therefore should live in such a way as to promote her own health. She must get enough sleep and exercise. She must eat sensibly of simple foods and see to it that her digestive organs are in good condition all the time.

She must—

1. Avoid constipation.
2. Eat meat sparingly.
3. Drink generously of all fluids.
4. Exercise up to the point of moderate fatigue and out of doors if possible.
5. Have plenty of fresh air by night and day.
6. Bathe every day.
7. Wear light, loose and comfortable clothing.
8. Sleep at least eight hours daily.
9. Have the urine examined every two weeks or oftener.
10. Consult the doctor frequently.

MISCARRIAGE. In women who are apparently normal there is always danger of abortion. It is claimed that this mishap occurs as often as once in every five pregnancies. The bond between the egg and the uterus does not become firm until the eighteenth week and so up to this time the detachment (miscarriage) may happen easily. There are many things that seem to bring about the interruption of pregnancy. Among them is hard work, such as lifting heavy burdens; washing and ironing, sweeping and manual labor to which one is unaccustomed. Strenuous amusements that jolt and jar the body have the same effect. Among these are dancing, tennis, skating, golf and horseback or motor riding. Sometimes also the egg is itself diseased or insecurely attached to the uterine wall and so it may be readily dislodged. Then too the misfortune may occur, as it often does, in consequence of disease such as syphilis, pneumonia, influenza, typhoid fever, tuberculosis or appendicitis. The signs of miscarriage are bleeding and pain. The dangers of miscarriage are bleeding and fever (infection).

An ABORTION (miscarriage) is sometimes unavoidable even when every precaution has been observed by the mother. If the fault lies in a disease of the developing child, or its death, the miscarriage is a natural and desirable effort of the system to rid itself of a foreign body, but if it results from a systemic disease of the mother or an inflammation of the lining membrane of the uterus it is an unavoidable accident. Frequently the cause can-

not be determined. To guard against miscarriage the woman must handle herself very carefully in the early months and especially at the menstrual epochs. If bleeding appears from the vagina or abdominal pain (cramps), she should got to bed at once and notify the doctor.

Before the sixth week the hemorrhage and pain may not be much worse than a disturbed menstrual period with the expulsion of clots. After this time, however, the loosening of the egg from the uterine wall may leave a large area so denuded of covering that profuse and even dangerous bleeding may occur.

If all the egg and its coverings are not discharged or if, as in the case of criminal interference, the egg is blighted or disturbed by an unclean instrument then beside the bleeding there is great danger of fever (infection). No one should attempt to go through an experience of this kind without expert assistance, for danger and death lurk at every turn. Anything expelled by the pains should be saved for inspection and the woman must not be surprised if her subsequent periods are irregular and abnormal for a few months.

BLEEDING at any time after the first month is wholly unnatural. In the first part of the pregnancy it may be a sign of abortion or of a pregnancy outside the uterus, (extrauterine pregnancy of ectopic gestation), while in the later months it may mean that labor is beginning, that the placenta has been loosened or that the placenta is implanted too low down. All these conditions are serious and any hemorrhage during pregnancy is so probably dan-

gerous that the doctor should be notified at once by day or night. Two lives are at stake.

The "OVERTIME CHILD" or the post mature child, is far more common than is generally supposed. All babies of nine pounds or more must be suspected of belonging to this class. It has been shown that about three-fourths of all these babies have passed the date estimated for their delivery. It is stated that six tc eight per cent of all babies go overtime.

We must admit of course that some babies grow faster than others and may be larger at eight months than another at ten. The greater size is no advantage to the babe since it is mostly water which squeezes out of the tissues during the first few days after birth, but the largeness of the child does often complicate the labor and make it more difficult. For this reason all pregnancies which have passed the estimated date of confinement should be watched carefully and the babe measured at regular intervals. More babies are lost from post maturity than from prematurity.

The ABDOMINAL WALLS may be strengthened by appropriate exercise before and after gestation so that the muscles will preserve their tone. After delivery the nursing of the child helps greatly in preserving the figure and waist line. About the seventh month the abdomen gets hard and tense and in places the skin becomes overstretched. It gives way under the strain and forms long or short lines like scars. (Lineae gravidarum or striae.) The tightness may be relieved considerably by rub-

bing in cocoanut oil or cocoa butter, olive oil or vaseline. These appearances on the skin are quite frequent and harmless, but if the lines seem to stick out from the skin and show color, or if pain occurs in the abdomen, or if the woman has swelling of limbs, passage of blood, or disorders of vision or hearing she should send at once for the doctor.

FOETAL DEATH. Sometimes the foetus dies in the uterus and is not immediately expelled. No harm follows the retention of a dead egg unless infection occurs. In the first and second months it may be absorbed but at later periods it must undergo degenerative changes.

The signs on the part of the child are entire cessation of foetal movement. On the part of the mother a sense of weight in the abdomen may be noted, a general feeling of malaise and possibly a bad taste in the mouth. The doctor will note that the uterus is not growing and does not conform to the period of the pregnancy. The breast may also show signs of retrogression. Even late in the pregnancy the condition may exist for weeks without injury to the mother.

PREPARATION FOR CONFINEMENT

ASEPSIS. The foundation of all the success of modern surgery is surgical cleanliness. The confidence with which the most delicate operations are undertaken is due to this elaborate exaggeration of purity which is called asepsis. Asepsis includes that of the surgeon, of his patient, of his nurse and of his surroundings. In preparing for a confinement we should use as much care to prevent contamination from filth and micro-organisms as for a dangerous surgical operation in the hospital. This infection can be communicated to the patient by her own hands, by her nurse or the doctor, by the unclean instruments of the doctor, by unclean dressings, or by germs from other parts of the patient's body.

It is true that infection sometimes occurs under the most ideal conditions, but the danger to life diminishes in exact proportion to the thoroughness of the asepsis. If we can see year after year pass by without a case of puerperal infection in our hospital we should expect the disease to become far more rare than it is in the homes.

It is for the safety of the patient that the conscientious and competent doctor scrubs his hands, rinses them in antiseptic solutions and puts on sterile linen clothing and rubber gloves that have been boiled. It is for the patient's safety that her body is washed and scrubbed and shaved and covered with linen which has been boiled and dried. It is for the patient's safety that the confinement room is stripped

of all its germ carrying objects and it is for her safety again that her nurse is scoured and scrubbed and manicured and gloved and even then handles the instruments and dressings with long forceps which are kept in an antiseptic solution.

It is of the utmost importance that the doctor and nurse should be conscientious, alert and skilled in modern surgical asepsis. If such assistance is not available it will be far safer to go to a good hospital where the laws of sterilized cleanness are enforced.

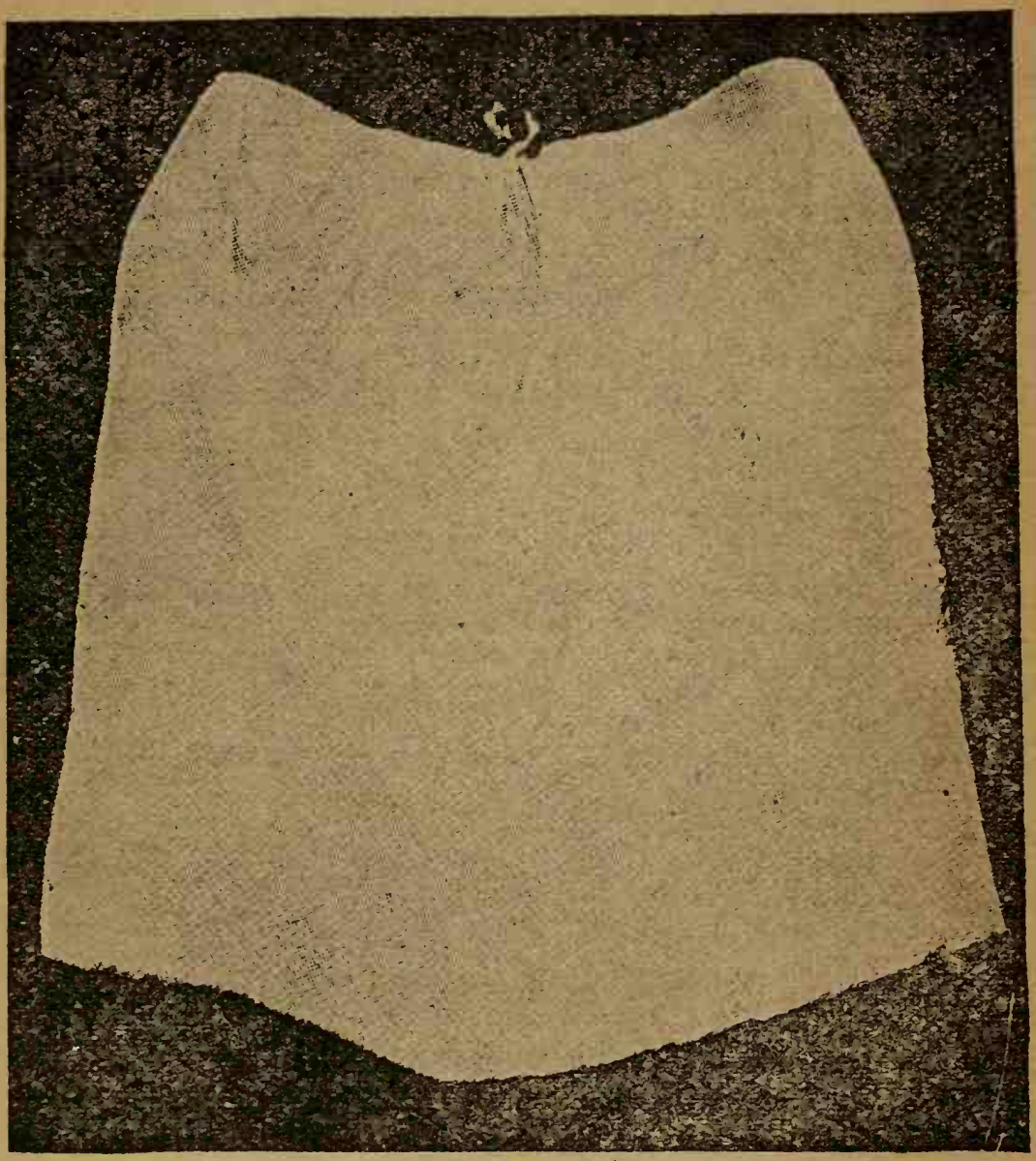
The doctor and nurse should be engaged as early as possible and by preference always those who work harmoniously and sympathetically together. The date for the engagement of the nurse must be carefully worked out as she will expect to be paid from that time. She cannot afford to remain idle. The expense of all this precaution may seem extravagant, but it is wise to use money to make life easier and happier and longer.

Whether to go to a hospital for confinement or stay at home is often debated. Many women feel that the home will be broken up if they leave it. But to turn a modern bedroom into the ideal sanitary conditions of a hospital is extraordinarily difficult and furthermore the patient in the home is constantly distressed by home problems when she needs all her energy and strength for recovery. Often the friends and relatives advise against the hospital on the ground, expressed or concealed, that they will be unable to visit the patient as freely as they wish. These are the selfish self-centered friends

who think only of their own indulgence and besiege the sick room until the patient is exhausted and her convalescence retarded. The absence from home rarely lasts more than a couple of weeks and even this vacation is all too short for the women whose lives are restricted and bound by the narrow walls of housekeeping.

The hospital is merely a high class hotel erected and maintained for the care of the sick and when one deducts the cost of living at home the hospital charges shrink considerably while the margin of safety is enormously increased. We must think of the hospital as a great scientific laboratory which has all modern appliances at hand and whose first and only concern is the welfare of the patient who has sought shelter. It is a place where every legitimate whim of the patient can be immediately realized and every comfort is available and the best is none to good for the mother and her babe. There is a widespread fear among the uninformed that babies may get mixed in a hospital. This fear is groundless. The most elaborate care is exercised at all times to prevent such an accident. Mother and babe are marked to correspond and in so many different ways that in a well ordered hospital it is as difficult to shift babies as it would be in the home. To the inexperienced all babies look alike, but they really differ as radically as adults.

If the confinement is to occur in the hospital all the supplies are usually furnished, but if at



Baby's dress with winged sleeves.

home it will be necessary to obtain quite a list of things. These may be—

3 hand basins, 10-in. in diameter.
3 nail brushes.
1 douche bag, 2-qt.
15 yds. non sterile gauze.
2 lbs. each of cotton batting and absorbent cotton for making bed pads.
2 pieces rubber sheeting, 3 ft. x 6 ft.
1 Jar borated gauze, 5 yds.
4 oz. Lysol.
2 oz. green soap.
2 oz. benzoated lard.
8 oz. alcohol.
1 nail file.

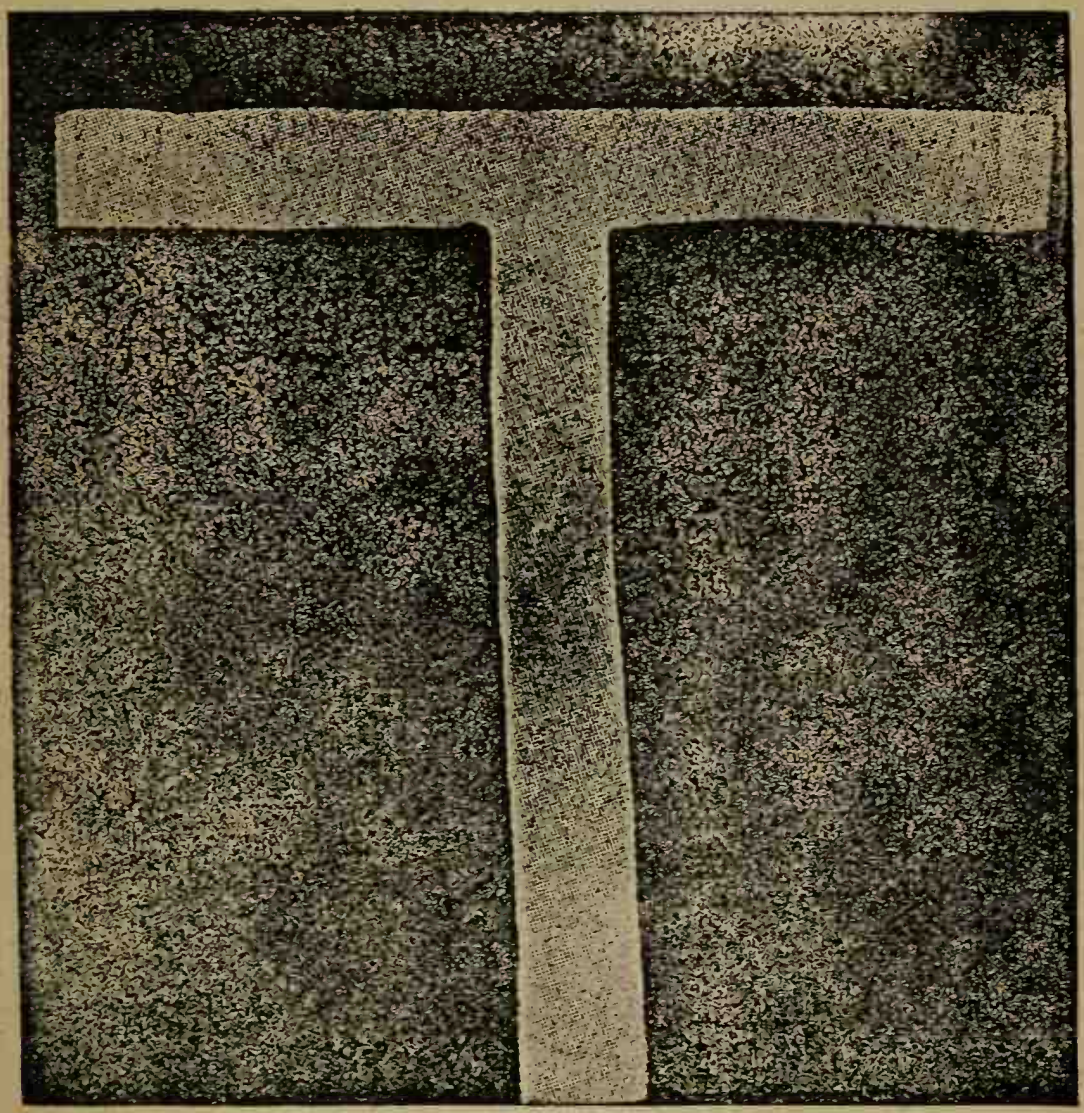
Among the household supplies for sterilization should be—

4 sheets.
2 dozen towels.
2 pillow slips.
3 abdominal binders of unbleached cotton, 14x36 inches folded and hemmed.
4 T bandages.
2 jacket parts of pajama suits.
2 pairs long white stockings.
3 packages sanitary napkins of pads.
2 obstetric pads, 1 in. x 36 x 36.
1 hot water bag.
1 jar applicators (cotton twisted about toothpicks).
1 jar gauze pledgets for cord and other dressings.
1 bed pan, 1 glass drinking tube, 1 medicine dropper.

Each should be neatly wrapped by itself and labeled.

Whether the baby comes at home or at the hospital an infant's outfit will be necessary.

12 plain slips 24 inches long, of dimity or nainsook, with winged sleeves.
3 long sleeve shirts, silk and wool, size No. 2.
6 pinning blankets, of outing flannel for a winter baby.



T-binder, used in all cases after the fifth day post partum.

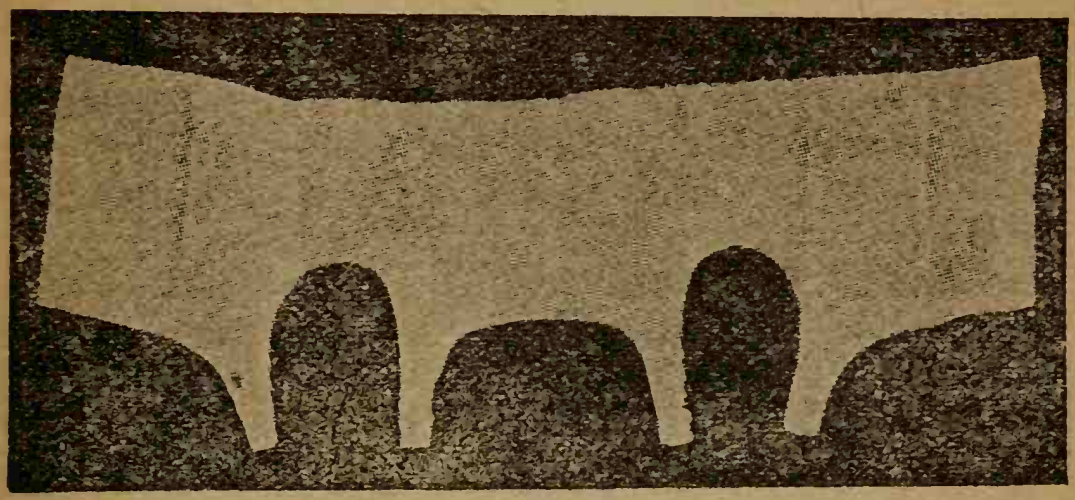
3 bands, 6x18 in., clip or notch edges; do not hem.
2 petticoats, flannel bottom and muslin waist, without sleeves and with small buttons on shoulders.
3 outing flannel wrappers.
6 plain, soft muslin night dresses.
3 knitted night gowns (Arnold), light weight.
4 dozen light weight cotton diapers, 20x40 in. Bird's-eye linen is best. Wash and dry in air before using.
4 soft towels.
2 quilted pads.
4 soft wash cloths.
4 wrapping blankets, wool or cashmere.
1 pair scales that weigh ounces and fractions thereof.
1 can talcum powder.
¼ lb. boric acid crystals.
½ lb. absorbent cotton.
4 dozen safety pins.
1 cake castile soap.
1 crib. Better than a bassinet because it can be used several years longer.
1 paper mache, rubber or enamelware bath tub.

This may seem like a great deal to get together, but it will be found to be none too much.

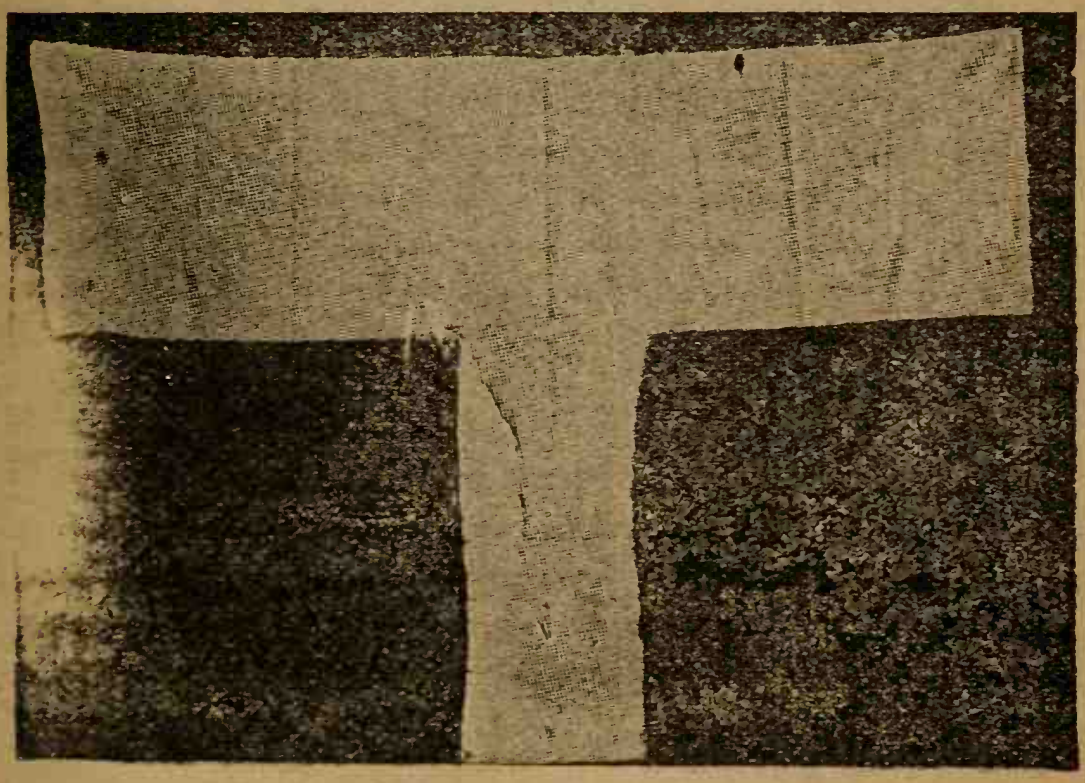
Sanitary pads can be made by cutting the gauze into strips 8 in. x 12 in. and folding each one around a single layer of cotton. Each one should be about an inch thick.

Delivery pads can be made of cotton batting quilted through gauze, 4x36x36 in. Newspapers can be inserted between them and the bed if a rubber blanket is not available.

Gauze sponges are made by cutting gauze into 15-in. lengths, the width of the piece. Fold down the raw edge 3 in. Double the strip by putting the selvedge edges together having raw edge of fold outside. Fold into thirds and turn



Breast binder.



Abdominal binder with crosspiece to hold vulvar pads

the sponge inside so all raw edges will be inside.

Cotton pledgets are merely balls of absorbent cotton as large as an egg with ends twisted. Make several dozen and keep in pillow slip.

Gauze squares or wipes are cut into 4x4-in. sizes.

All must be sterilized by suspending them for an hour in the wash boiler under steam pressure in a muslin hammock which hangs down one-third the way from the top. Dry in sun or oven without opening.

The room may well be the largest and brightest in the house. All draperies, hangings and upholstered furniture should be removed. It is desirable to have the bath room as near as possible.

The bed, single preferred and metal if possible, should be furnished with a comfortable mattress. Whatever bed is used should be accessible from both sides and raised as high as 32 in. from the floor. Take the castors off and put two bricks under each leg. If it sags in the middle, a couple of table leaves may be put across the springs under the mattress. The foot of the bed must be directed toward the light whether natural or artificial.

The ONSET OF LABOR is signalized by certain easily recognizable signs. Usually the woman feels heavy and unstable in the last weeks. It is hard to walk. The bowels may become loose and urination frequent.

About two weeks before the pains begin lightening will occur in 50 per cent of the cases.

This means that the head has gone down into the pelvis and consequently the waist line drops, the woman breathes easier and she feels LIGHTER, but she does not walk so well. Nevertheless it is a good sign. Sometimes a piece of mucus is discharged a few hours before actual onset. It resembles the white of a lightly poached egg, but is stained with blood on one side. This is called the "show." Occasionally the "waters break" and the phenomenon is recognized by a gush of fluid. This means that the egg sack has ruptured and labor usually follows within twelve or twenty-four hours.

The SIGNS of actual labor, however, are the "pains" which are characterized by regularity as well as suffering. They may come ten minutes apart or five, but the interval will be extremely methodical. As the process continues the interval between the pains tends to become shorter and the suffering more severe. Labor is of course a natural function but through centuries of civilizing influences many complications have developed. In addition to the various mechanical difficulties of the act there is always the threat of infection which compels the observance of the elaborate ritual in cleanliness which has been described elsewhere. In spite of the good results obtained in high class hospitals and in spite of the greater intelligence of the people and the conscientious care of competent attendants infections do occur and it is deplorable to report that of all the deaths that follow labor forty-five per cent are

due to childbed fever which is a preventable disease. In our good hospitals thousands of confinements are conducted to a happy end without a single loss from infection, and the doctor, the nurse and the patient should join in a friendly rivalry to exclude it from the homes.

PAINLESS CHILDBIRTH.

ANAESTHETICS are a modern discovery. The evangelist said "neither shall there be any more pain," and the modern physician, by means of anaesthetics, strives to abate that excessive suffering in childbirth which is disintegrating and destructive to the vital forces. Many a woman who has passed through a particularly severe labor remembers her experience with a horror which forever precludes its repetition.

Much of this suffering is wholly unnecessary. We are living in an age of relative painlessness and all the world is seeking to make childbirth less painful and less dangerous. No woman unless she herself requests it, or unless some complication makes it necessary, should be permitted to pass through this ordeal without the aid of an anaesthetic judiciously selected and carefully administered.

Pain deadening agents are numerous, harmless, inexpensive and successful and it is only a matter of experience to find a way of reducing the suffering to an easily bearable if not negligible degree. It may be the "laughing gas" or so-called "twilight sleep," it may be chloroform, ether or ethylene, but some one of them or some combination will be found peculiarly appropriate to each case. It will be both safe and efficient. The necessity is extreme and it is barbarous to deny a woman this relief.

LABOR.

For convience of description labor is divided into three stages:

The first is the stage of dilatation.

The second is the stage of expulsion or the one wherein the child is delivered.

The third is the stage of the afterbirth or the one in which the placenta delivers.

The first stage is the longest and while it is not often the most painful it is frequently the most trying part of the ordeal. Its duration is variable, but usually much longer with the first than with subsequent babies. The period averages from sixteen to twenty hours in the former and about eight in the latter. During the first stage the mouth of the uterus enlarges under the influence of the pains until it forms a wide channel for the passage of the child. It widens from an opening a quarter of an inch in diameter to one which varies from three and a half to four and a half inches. This change must always take place before the child can advance. This part of the labor is always particularly discouraging because the woman does not feel that she is making any progress. It does no good to bear down at this time because the opening is not large enough to let the head go forward.

The position the woman assumes is generally of little consequence. She may sit, stand, lie, walk about or even sleep if she can during the pain free intervals. The pains usually come much faster and stronger if she sits, stands,

walks about or lies upon her back. During this passive period the woman can take her bath, shower preferred, and a soap suds enema. The hair should be braided in two strands and coiled around the head out of the way. The bladder should be emptied at frequent intervals. The genital region should be shaved as a part of the aseptic ritual. No one objects to this when its importance in preventing blood poisoning is explained. The bed can be prepared and all guests should be kept at a distance if possible.

The DOCTOR should be notified just as soon as the labor starts so that he may assure himself of the patient's condition and arrange his other affairs for an absence of uncertain duration. Having once visited the patient he can return or stay as the necessities demand. In general he should always be close by when the pains come as often as three minutes apart.

DIET. It is true that most women care but little for food after labor begins, but on the other hand their physical strength must be maintained. Lack of food sometimes results in unnecessary faintness, in general weakness, delay of the labor or even a hemorrhage. For these reasons it seems best often to push the nourishment a little. Mild easily digested food is to be selected, like tea and toast, ice cream, buttermilk, grape juice, custard, egg-nogg or a cereal which could be served daintily at regular intervals.

PREPARATION OF THE BED. Meanwhile as the second stage approaches the woman will

want to lie down. The mattress should be covered with a rubber sheet, or many thicknesses of newspaper. A full sheet is laid on next and a small rubber sheet, or oil cloth, placed across the middle. Over this is placed a sheet, once folded, and then the delivery pad to receive the discharges. The patient should be comfortably warm at all times and hot water bags should be used if necessary.

When the DOCTOR ARRIVES he may want to examine the patient either externally or internally or both. In this case the woman lies upon her back, a sheet is placed across the lower part of the body and the night dress raised as far as the breasts.

For the external examination the careful doctor will wash his hands in warm water and scrub them with green soap and a nail brush for four or five minutes. The general practitioner who comes in contact with pus or any other contagious cases will want to prolong the washing process to fifteen or twenty minutes.

When the hands are dried upon a sterile towel he is ready to have the sheet lowered. He notes the location of the head and back, finds and counts the heart tones, estimates the descent of the head and the character of the pains. The capacity of the pelvis and the size of the child are duly measured so that all parts of the problem are up for appreciation.

If an internal examination is required, the doctor will return to the scrub room, pare and clean his nails, scrub again his hands and the

arms to the elbows with warm water, green soap and the nail brush. He then soaks his hands in an antiseptic solution for five minutes. The hands are dried on a sterile towel, powdered and a pair of sterile gloves drawn on. A sterile gown is desirable also, but not really necessary if the doctor is careful not to touch anything with his clean gloved hands. The legs of the patient are now separated and wrapped in the ends of a sterile sheets. The knees are spread apart and the external genitals are sponged with pledgets of cotton wrung out of antiseptic solution. The fingers are now introduced. This may seem like a very elaborate ceremony, but in no other way can the doctor's conscience be clear if by any chance the patient should develop a temperature.

In the SECOND STAGE the pains are more severe but not so nagging in character. Usually they are easier to bear. The woman now feels an irresistible desire to bear down, like a hard bowel movement, in the effort to drive the child forward. The muscles of the abdomen come into action and she seeks to help by pulling or pushing against something. If the room is prepared and the clean linen ready to apply the desire to bear down may be encouraged. An anaesthetic will often aid in relaxing the tissues and will prevent unnecessary suffering. The actual birth of the child need not be felt at all as a rule.

For the THIRD STAGE the woman is kept upon her back. Bleeding must be watched for and clean dressings applied as often as neces-

sary. The uterus must be felt of occasionally through the abdominal wall to see that it stays hard and the pulse and breathing should be noted. A glass of hot milk will be welcome to the patient as soon as she can swallow. Now let her sleep as long as she can.

BAPTISM. Six babies out of every hundred die at birth under circumstances which may or may not be foreseen. A careful watch of the fetal heart tones will often warn the doctor that the baby is failing or about to die. Among Catholic families and other deeply religious people the death of an unbaptized child is an extremely painful event. It is therefore necessary in case of great danger to the child for some one to perform the customary ceremonial. The doctor, the nurse, or even a friend or relative can do this. The last rites can be administered to the living child while the head is high up by using the aseptic solutions and a little more than ordinary care.

EMERGENCIES

Suppose the case terminates or threatens to terminate before the doctor arrives. The strength and frequency of the pains can be diminished somewhat by position and so under these circumstances the woman should be placed on her side. Then a member of the family or the nurse can follow as nearly as possible the routine for the conduct of the case which has been outlined. The main thing is to avoid touching any of the surgically clean dressings in such a way or with such hands that the contamination will be or may be communicated to the patient. The patient need not really be touched at all but as soon as the head appears it is raised and supported and steadied until the next contraction drives it completely out.

As soon as the child is born the doctor holds it up by the feet so that by gravitation all mucus and fluids will run out of the mouth and windpipe. Almost at the same time the child will generally gasp and cry out. If it does not, a gentle slap upon the back or blowing upon the chest will stimulate the cry. The child must not be laid down, nor in such a way that it can suck fluids into the mouth. The cord should be tied in two places with a piece of tape or bobbin and then severed between the knots with a pair of clean (boiled) scissors. If bleeding occurs from the cord let another tape be tied around it between the one left on the cord and the body of the child. The cord must be kept from contamination by

the most scrupulous attention to cleanliness. Many babies are lost through infection at the navel by unclean dressings. The child is next wrapped in a soft warm blanket and removed to a safe place. The doctor will want to inspect the afterbirth as soon as he comes. Save it for him. Clean dressings are now put on the patient while hot water bags around her give comfort and avoid chill. Normally she will want rest and sleep. She will have lost a pint or so of blood, if the amount seem to be more than this or it continues to flow, a hand on the abdomen should seek the hard mass of the uterus which ought to be found immediately under the navel. If not apparent at once the hand can be pushed a little deeper into the pelvis and by moving it about, soon a hard lump will come up from below or down from above while at the same time there will be a gush of blood from the vagina. Usually there is but one gush and then the flow ceases.

PRECIPITATE LABOR is an over rapid advance of the child wherein all the stages of labor, or at least the first two, are merged into one another and the child expelled in just a few pains.

It may be due to a large pelvis, a small child or strong contractions which are not especially painful. The child in consequence is often delivered in undesirable or unclean places and may perish from the fall, from the cold or from lack of facilities to revive it. The mother also is in danger of deep lacerations of the soft tissues and of severe hemorrhages.

AFTER CARE OF THE MOTHER

The PUERPERIUM, or the lying-in period, is the name given to the time during which the pelvic organs return to their normal non-pregnant state. It may be two weeks or two months.

In the course of the first three days the temperature may rise to 100 deg. F. where everything is entirely normal. This rise is not significant unless it persists or increases. It is not due to the inflow of the milk. There is no such thing as milk fever. The presence of a fever after childbirth, i. e., a temperature of 101 deg. F. for more than twenty-four hours is DEFINITE EVIDENCE OF UNCLEANLINESS SOMEWHERE IN THE CONDUCT OF THE LABOR. It may last but a short time or it may be the beginning of a serious infection of CHILDBED FEVER, which we now know is wholly a filth disease; a disease of contamination which can and should be prevented.

The URINE at first may be increased in quantity while at the same time emptying of the bladder may not take place. This condition arises from the swollen and bruised tissues which mechanically occlude the canal and from an associated numbness of the nerves. The necessity of lying on the back makes the trouble worse. Urination may sometimes be induced by applying hot compresses over the bladder, by letting warm water run over the genitalia or by slight pressure upon the bladder, by giving an enema, or by inhaling smell-

ing salts. If these measures fail the patient may be allowed to sit up on the bedpan for a few times. If persuasive means fail the catheter should be used but only after the instrument has been boiled, the opening to the bladder flushed with a weak antiseptic solution and the catheter introduced *by sight*, with hands that have been thoroughly scrubbed in soap and water and rinsed in an antiseptic solution. The bladder should not be allowed to go unemptied more than eighteen hours.

The DIGESTION is often disturbed and the stomach must be treated gently. Liquids in abundance for the first two days is the rule, then semi-solids and only a gradual return to the regular diet as the stomach seems able to functionate. If the milk is scant the fluids must be pushed at all times. Acids or alkalies, foods cold or hot, rich or otherwise and meats or vegetables all make excellent milk *if digested.* The old idea that acids should not be eaten has been abandoned. Salads make a refreshing addition to the menu and strawberries and tomatoes may be eaten freely if they digest. Food that disagrees with mother will disagree with babe. Let the diet be abundant and nutritious. The woman is now eating for two but the intake should not be excessive. She should eat slowly, chew her food thoroughly and avoid worry. Scanty milk usually means that more food and more fluids should be taken. Much milk means less food, less fluids and a generally stricter diet. The patient should go out of doors as soon as she can do so comfortably.

INVOLUTION is the name applied to the process wherein the uterus shrinks back into its non pregnant state. The rate of shrinkage varies greatly in different women. Ordinarily at the end of the first week the round hard top of the uterus can be felt midway between the navel and the pelvic bone. After this it shrinks very rapidly and by the ninth or tenth day it may be impossible to find it. If the mother nurses her babe the action goes on much faster and the waist line is restored more rapidly and satisfactorily.

The BINDER is merely a girdle or bandage put around the waist between the hips and the ribs. It should be just snug enough to give the woman a sense of support. The napkins are pinned to it and held in place. Whether tight or loose will not make any difference in the patient's figure subsequently. A vaginal discharge follows delivery. It varies in character, appearance and amount from day to day according to the nature of the woman and the severity of the labor. The discharge is made up of wastage from the shrinking uterus mixed with mucus and blood. Gradually it grows whiter in color and ceases altogether about the twelfth day.

AFTERPAINS are common in the puerperium. They are painful contractions of the uterus which aid in expelling the waste material, keep the organ from bleeding and hasten its return to normal. They are less common with the first baby. The pains are beneficial though distressing and do not usually last more than forty

eight hours. If they do, there is probably a clot which they are trying to expel. The nursing of the child intensifies the pains and hot water bags often relieve them. Ask the doctor.

The BREASTS are made ready for lactation twelve hours after delivery by cleansing with castile soap and warm water and then rinsing with a fifty per cent alcohol solution. The nipple is further cleansed with an applicator saturated with a fresh boric acid solution. The nipple is cleansed before and after each nursing with a fresh boric acid solution. A careful mother can easily do this herself. If the nipples become sensitive they should be exposed to the air for two hours every day. If they continue sensitive, bathe them with a cold boric acid solution. All cracks, abrasions, fissures and sore spots should be reported at once to the doctor.

The irritation of the baby's mouth stimulates the flow of milk, hastens the involution of the uterus and the return of the normal figure. The milk usually fills the glands about the third day. Its arrival is signalized by a sense of distension with some heat and a certain amount of pain. It is not the cause of the slight fever which often comes at the same time. The ENGORGEMENT of the breasts may be so great that the nipples are drawn in and the whole gland is so hard that it feels like a cake, hence the name "caked breast." The name was given under the mistaken idea that the breast was filled with a lake of milk which had "curdled." The milk does not collect in a reservoir in the human breast but it is secreted as

needed. The more the breast is stimulated the more the milk flows in. The engorgement is a mere congestion of the tissue around the true milk glands by serum from the blood. It disappears or at least ceases to be painful in about twenty-four hours. If it lingers longer or becomes too uncomfortable, an ice bag can be applied to relieve the discomfort. The flow of milk can be greatly influence by increasing or diminishing the fluids. No tight compression binder should be applied. It is more painful than the engorgement and furthermore it is wholly useless. No massage should be used for this only increases the flow of the milk. If the baby cannot draw off the excess and keep the glands only moderately distended then the breast pump may be used for a few times.

Use only one breast at each feeding. If the infant is sturdy it should remain at the breast not longer than fifteen minutes. Weak babies may need a longer nursing period. At one time it was the rule to keep the babe at the breast for twenty minutes but it is now known that the breast is completely emptied in from ten to fifteen minutes. Prolonged nursing does not give the babe more food but only an inflow of air which causes colic.

Hold baby upright after feeding and pat the back and buttocks gently to expel any air which may have been swallowed, then put him immediately into his crib. When baby cries between feedings, it may be that the milk is not satisfying or that the babe is thirsty. Give him

a bottle first of cool water for a few times before accusing the milk.

The mother's breasts must be kept scrupulously clean. Both breasts and nipples should be washed with soap and water every day and the mother's hands should be freshly washed before nursing baby. Between nursings, two or three thicknesses of clean gauze should cover the nipples to keep them from contact with the clothing and to absorb the excess of milk. The gauze should be thin enough to permit air to reach the nipple.

MASTITIS, or inflamation of the breast, is a true emergency which comes on most frequently during the first two weeks. It usually starts in the absence of the doctor or nurse. The patient notices a tender place in the breast, or a lump that is sore or a red spot and at the same time she feels tired. If she takes her temperature she will find it high. She has fever. The doctor should be called. Meanwhile an ice bag is put *at once* on the tender spot and kept there for twenty-four or thirty-six hours. In nine cases out of ten the soreness subsides, the temperature goes down and finally the trouble goes away. The *immediate* and *constant* use of the ice bag is the secret of success.

Do not use anything hot on the breast unless at end of thirty-six hours the breast seems no better. Then hot compresses can be used for in this case the ice has failed to avert the abscess and heat is now put on to hurry the suppurating process to its finish. It will probably have to be opened. Do not be afraid of the

ice bag. It will not "cake" the breast nor be the means of "taking cold."

The BOWELS of a lying-in woman are regularly constipated. Lack of exercise, detention in bed, relaxed abdominal walls and a diet of rich food with a small residue all contribute to the condition. On the morning of the second day the bowels should be moved with a laxative, castor oil preferred, and followed in from three to six hours by a soap suds enema. The bowels should move daily thereafter for fever sometimes arises from constipation. The *vaginal douche* is rarely used any more. It may occasionally be desirable for foul and offensive odors, but its possibility in this direction is counter-balanced by the danger of infection in the administration.

The GENITALIA are kept clean by sponging away the dry and wet discharges with an antiseptic solution and in case the discharge becomes foul, a single douche may be given at the end of the first week. The douche point must be boiled, the water boiled and cooled to the temperature agreeable to the patient, (it must not be tested with the finger) and to each quart a teaspoonful of formaldehyde is added. The reservoir must not be much higher than the hips.

REST is essential and for the first week the most thoughtful and considerate friends will best show their interest in the patient's welfare by staying away from the sick room. The woman should have a nap every afternoon and

at least six hours sleep at night. Sleeplessness if prolonged should be reported to the doctor.

GETTING UP on the ninth day is the tradition. This may or may not be desirable and safe. There are three things to be considered. The return to normal size of the uterus, the presence of stitches and the strength of the patient. The involution may be complete on the 5th day but the woman may be so weak that she cannot stand or even sit. Or she may be strong enough to stand on the eighth day but the uterus is still large and if she stands up or sits up the heavy organ drags down and the ligaments are so weakened that a malposition results. The patient may be months longer in regaining her strength and may possibly need a surgical operation to correct the difficulty. In general the patient should not get up until the uterus has shrunk down into the pelvis beyond where it can be felt with the hand, the stitches should be out, if there are any, and the woman should feel strong enough to stand up comfortably. It is often a saving of time to stay in bed twenty days rather than nine.

MENSTRUATION ceases during lactation in about two-thirds of the cases and when the nursing period is over the flow returns in from four to six weeks. When the child is not nursed and occasionally if it is, the menses come back in a month or six weeks. The idea is common that a menstruating woman should not nurse her child because the milk at such times is deleterious. The menstrual flow is a hemorrhage and produces no more effect upon the

milk than a nose bleed. The bleeding does reduce the amount of blood in the body and therefore diminishes the total quantity of milk. This in turn makes the proportion of solids in the milk larger than usual and may give the child a little trouble in digesting it but the remedy is not to take the child from the breast but to increase the mother's fluids. There is also a popular notion that cnoception cannot occur during lactation and women sometimes prolong the process unduly for this supposed protection. The theory is wholly unfounded for conception often takes place during lactation and the protraction of the nursing period simply endangers the life of the nursling through the gradual loss of food elements in the milk. The thin and watery secretion does not satisfy the babe. He becomes sleepless, nervous and fretful from undernourishment.

BATHING in the tub may be resumed as early as the third week.

HEADACHE sometimes occurs during the puerperium. It is not natural and the cause should be sought in some fault of excretion (toxemial) in too great a blood loss during the labor, exhaustion from visitors, hunger, ergot, sleeplessness or the condition of the nervous system.

FIRST CARE OF THE BABY

Meanwhile we have been neglecting the baby. As soon as the body is born the child should be held up by the feet and the head drawn back enough to make the windpipe straight. This allows the fluids and mucus to run out of the nose and mouth by force of gravity. The mouth can be freed entirely from mucus by wrapping the little finger thinly with cotton and carrying it clear to the back of the throat and withdrawing it with a wiping motion. The nose is wiped on the side, downward and outward to clear the nostrils.

The eyes are wiped outward from the nose to clear of mucus and then the lids are gently drawn apart and one drop of a 1% solution of silver nitrate is put into each eye. We do this because during the passage into the world the eyes may get some infectious material into them which produces inflammation of a very dangerous character. In fact it often results in blindness, so commonly indeed that nearly one-third of all the blind in our asylums are blind from birth and could have been well and healthy if these simple precautions had been employed.

If symptoms of inflammation appear such as redness, swelling of the lids and a discharge of pus, no time should be lost in securing the services of the most expert physicians. Every hour passed without treatment is an hour lost. The pus from these eyes is remarkably virulent and the attendants must use every possible precaution to avoid spreading the disease to

themselves or others. The contagion is carried on fingers, towels or cotton pledgets.

The SKIN of the new born babe is covered with a thick greasy substance (vernix caseosa) which is more easily removed if it is first mixed with lard, olive oil or vaseline. Soap and warm water is next applied with a soft cloth or some pledgets of cotton. This process need not be undertaken until the mother has had every attention and can be left safely.

Keep the soap out of the baby's eyes. Remove the water from the body with a soft dry towel of old linen or cotton. Dredge the navel with equal parts of boric acid and talcum powder, or with talcum powder alone. Wrap the stump of the cord in a piece of gauze and cover it up with a pad. The binder comes next. It should be sewed on, not pinned. The whole performance, including the bath, should not take over twenty minutes. While cleaning and dressing the child, the body should be carefully inspected for imperfections. The fingers and toes should be counted, the back examined and the openings of the rectum and bladder should be sought out and their normal character certified. Next the baby should be weighed.

A spray or a sponge bath may be given every day but the child should not be placed in the tub until after the cord is off and the stump healed for infection through the cord occurs very easily. During hot weather two or three sponge baths may be given every day but the temperature of the water should range from ninety to ninety-five degrees. The warmth can be tested on the inside of the elbow and it should feel lukewarm.

For the first and subsequent baths in the tub use a definite routine. Put the baby on the lap and bathe the eyes with pledgets of cotton dipped in boric acid solution. Use each pledget but once. Clean the nostrils with twisted cords of cotton dipped in olive oil. Next place baby gently in the tub with a hand under his head and the fingers extending down below the shoulders. Lower baby into the water slowly so as not to frighten him.

Protect the baby from draughts and chills and do not leave him in the water too long. From two to five minutes is enough. Wash the face with warm water but without soap. Castile or any other pure soap may be used freely on the body. The genitals must be washed carefully and inspected for abnormalities. Report anything unusual to the doctor. Pat the baby dry with a large soft towel and powder well taking especial pains with all the folds and creases of the skin.

The EARS must be cleaned but not by inserting a hard object into the canal. Wash the external ear carefully outside and in with a soft piece of old cloth. Dry well and pay especial attention to the creases. Do not put anything into the ear canal.

The BUTTOCKS are gently wiped with a soft cloth after each change of napkin. Once a day only they are washed with soap but very sparingly. Dredge generously with toilette powder.

OVERLYING. Baby should not lie with the mother at night lest she turn over in her sleep and smother it. Baby should sleep alone, sleep

as much as possible and out of doors whenever it can be arranged. Anyhow the windows should always be open except in the coldest weather.

FEEDING. Twelve hours after labor the mother is sufficiently rested for the child to go to the breast. Usually there is no milk but only a thick whitish secretion, the colostrum. Until the third day when the milk comes in, the child should be fed every three hours with sterile water in which milk sugar has been dissolved in the proportion of one teaspoon of sugar to six ounces of water. It should be fed from a bottle which has been boiled and through a rubber nipple which has been soaked in boric acid solution; as much boric acid as the water will take up.

The babe should be fed ordinarily every three hours for six feedings, beginning at six in the morning. The night feeding is omitted unless the baby does not gain A night feeding should be left off as soon as possible so mother can have her night's rest and baby's stomach also. Some babies do better on two hour feedings and some on four but whatever schedule is adopted should be rigorously adhered to and baby wakened, if necessary, at feeding time. Baby has nothing to do but eat and sleep.

No matter how skillfully cow's milk or other food is mixed the fact remains that mother's milk is the best food for the baby.

From lack of food and on account of bowel movements and urination baby will LOSE WEIGHT in the first week but the birth weight should be regained in ten or twelve days. After

this time baby should gain four or more ounces each week. As long as this gain continues the baby is thriving no matter if colic is present or green stools or even fever. The disturbance is only temporary. On the other hand when baby ceases to gain the fault must be looked for. The baby may be really ill or it may be simply a trouble with the food. The milk may not be sufficient in quantity or rich enough. The babe should take at least 2 oz. of food for each pound of weight in every twenty-four hours. At the first appearance of loss in weight the doctor should be notified. Always weigh the baby naked. The most convenient time is just before the regular bath in the morning. The weight is reliable only if weighed at the same hour each day and before the feeding. If baby is weighed in a blanket weigh the blanket separately and deduct it from total weight. Baby must be weighed every day for first two weeks.

Often the babe REFUSES TO NURSE, or the nipple gets under the tongue instead of over it and a long course of discipline and training is necessary before the lesson is well learned.

Substitution of artificial food for breast milk may be required on account of the milk being poor in quality or insufficient in amount. The return of the menses does not affect the nursing child unless an excessive amount of blood is lost. Acute diseases such as erysipelas, pneumonia, diphtheria, typhoid fever, malaria, puerperal fever or a high fever from any cause usually dries up the secretion while diseases of the heart, chronic anemia and tuberculosis obviously demand the drying up of the breasts in behalf of both parties.

CONSTIPATION occurs in a certain proportion of all babies whether breast or bottle fed. It is a form of indigestion and may be removed by proper regulation of the food. Call the doctor.

LUMPS on the baby's head at birth usually disappear the first day but sometimes they come later and stay longer. This enlargement is commonly due to an effusion of blood which is absorbed in a few weeks. Let the doctor see it.

CIRCUMCISION is performed in these days much more frequently than in the Biblical era for the operation is found to be desirable not alone as a religious rite but as a physical necessity and even for cleanliness alone. Ask the doctor.

TONGUE-TIE is a term frequently heard in the old days. The affection is very rare but when it does occur a strip of thin membrane may be seen extending from the floor of the mouth to the extreme end of the tongue. It is not particularly important since it does not interfere with nursing as the old women insist. The child does not nurse with its tongue but with its cheeks.

The BREASTS of the new born babe may fill with milk (witch's milk) and become very hard. Let them alone, do not squeeze or massage them and the swelling will subside in a few days. Only occasionally does an abscess form from infection and this is due most frequently to the effort to empty them.

JAUNDICE may develop from the third to the sixth day and the yellowness will stay for a week or ten days. No treatment is re-

quired. It goes away. If it should persist, call the doctor.

INTERTRIGO, or chafing, is a form of eczema which comes from too much moisture, too much bluing in the diapers, too sensitive a skin or uncleanliness. Rubber pants often retain moisture injuriously. The child should be cleansed with oil instead of water and well powdered with stearate of zinc.

CONVULSIONS occur sometimes during the first two weeks. They may be due to injuries of the head during labor, they may appear as a symptom or systemic disease or a sign of intestinal trouble. They come from indigestion, curds, fever or certain conditions of the blood or nerves. They are not serious in all cases but irritation of the coverings of the brain must always be suspected and the doctor notified. The hot bath is the universal remedy and seems to be as good as anything until the cause is found.

HERNIA at the navel is a common complication of infancy. It is not due to excessive crying nor to improper tying of the cord nor to neglect by the nurse as is often charged. It is an imperfection of the abdominal wall which does not close as it should. It is a defect that comes with the birth of the babe and is brought to notice only when the child strains as in crying, or with the bowel movements.

Ordinarily the breach closes spontaneously. Occasionally it must be supported for a few weeks with a strip of adhesive plaster and sometimes though rarely an operation is required. Notify the doctor.

SUPERSTITIONS, TRADITIONS AND OTHER NONSENSE

IT IS NOT TRUE—

that the position a woman assumes during sexual intercourse will influence the sex of the child.

that the position in which she sits or the way she crosses her legs will influence the position of the child.

that pregnant women will be injured or the child misplaced, or the cord twisted, or knotted if she stands on a ladder or raises her hands above her head, to hang pictures or clothes.

that longing for particular foods or bon bons will mark the child.

that eating certain kinds of food, or not doing so, will affect the size of the child.

that a diet largely free from mineral salt will make the bones soft and therefore an easy labor. If the theory is true the child will be seriously injured, if not true the advice is worthless.

that ointments rubbed upon the abdomen will make labor easy. It would be just as effective to rub grease on the pump to make the valve work smoothly.

IT IS NOT TRUE—

that soap is good for the baby's eyes. Keep it out.

that the neighbor's advice is better than the doctor's. See the doctor first.

that bright lights are good for the baby's eyes. Give the baby as much sunshine as pos-

sible but shade the eyes lest they be injured permanently.

that the baby should be trotted on the knee, tossed in the air or rocked to sleep. All babies are happier and healthier if kept in quietude.

that baby should be wakened for exhibition to friends and relatives. It interferes with his growth. Waken him for food only.

that pacifiers and soothing syrup are beneficial. The pacifier is alive with germs and its constant use ruins the shape of the baby's mouth.

DON'TS FOR MOTHERS

Don't let the baby suck his thumb.

Don't give the baby food or drugs without the doctor's advice.

Don't let anyone with a cough or cold kiss or hold baby.

Don't let the baby lie in a wet napkin.

Don't forget to cleanse the bottle and nipple thoroughly.

Don't expose baby to flies or mosquitoes.

Don't allow baby to go for twenty-four hours without a bowel movement.

Don't forget to weigh baby regularly and report to doctor.

Don't excite baby at any time but especially before or after feeding.

Don't lift baby without supporting his back.

Don't feed baby irregularly.

Don't pick baby up every time he cries.